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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/583,231	05/17/2007	Neil Richard Birkett	F3347(C)	8228
201 7590 03/30/2009 UNILEVER PATENT GROUP 800 SYLVAN AVENUE AG West S. Wing ENGLEWOOD CLIFFS, NJ 07632-3100				
EXAMINER TOUSSAINT, DALILA				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
03/30/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/583,231

**Applicant(s)**

BIRKETT ET AL.

**Examiner**

DALILA TOUSSAINT

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF 298)  
Paper No(s)/Mail Date July 17, 2007.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Claim Objections***

Applicant is advised that should claim 18 be found allowable, claims 19-20 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. Claim 13 provides for the use of a premix, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant

is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
  2. Ascertaining the differences between the prior art and the claims at issue.
  3. Resolving the level of ordinary skill in the pertinent art.
  4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
7. Claims 1-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Cain et al. EP publication 1245156 A2 in view of Hara EP publication 0191487 A2.

a. Referring to claims 1 and 13-14, Cain discloses an edible anhydrous fat base system (premix) for preparing confectionary products that would demonstrate the effects of fizziness/ effervescence and/ or foaming (page 2, line 9). The fat based system composition comprises of active sub-particles: acids (lactic, tartaric, and mixtures thereof) and bases (carbonate and bicarbonate salts of calcium, sodium and potassium) (page 2, line 39-40). Since, Cain discloses the active sub-particles can be selected to give desired effects; it is inherent to adjust the level of acidity (pH) for the suitability of its intended application. It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

The active sub-particles are present in a network of particles consisting of stabilizers such as gum (page 2, line 41-45). The fat based system when combined with moisture/ water have a resulting solid content of at least about 20 (example 4) wherein the mixture is formed absent of mechanical aeration. The process of aerating the mixture by mechanical mean is absent in Cain disclosure

and it is inherent that the particulate system for effervescence in example 1 is what gives the fizzy/ foaming effect to the food product (Cain; ¶ 0009).

Although the above references teach a confectionary mixture comprising an acid, a carbonate and a stabilizer (Cain; ¶ 0006) as in the claimed product, it does not disclose the overrun of the product. However, applicant has chosen to describe his/her product with physical characteristics that are beyond measurement by this office and as a practical matter, the Patent Office is not equipped to manufacture prior art products and compare the claimed product with that of prior art products. Therefore, that burden is being shifted to applicant to show that the product of the references does not contain an overrun of at least about 30% and that the claimed product is indeed patentably distinct.

Also, Hara disclose multi-cellular foods that have a degree of overrun in the range of 50 to 200% (Hara; page 11, ¶ 1 and 2). The multi-cellular foods (foam foods) such as ice cream have shape retaining property and the effect of foaming that are obtained by a combination of an alkali (base) and a gum (i.e. carrageenin) in the composition (Hara; page 11, ¶ 3). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to that the overrun of Hara to obtain a multi-cellular food as the instant claim, would have been present in the primary reference too, since the primary reference discloses the same shape retaining materials that would have maintained the overrun, in that composition too.

- b. Referring to claim 2, Cain discloses a fat based system composition comprising of active sub-particles and bases (carbonate and bicarbonate salts of calcium, sodium and potassium) (page 2, line 39-40).
- c. Referring to claim 3-5, Cain discloses an organic acids comprising of active sub-particles: acids (lactic, tartaric, and mixtures thereof) (page 2, line 39-40). Lactic acid and tartaric acid are known forms of a monoprotic acid and a diprotic acid, respectively.
- d. Referring to claim 6, Cain discloses in table 1 a particulate system for effervescence wherein the molar ratio of acid to carbonate present is about 1:1.
- e. Referring to claim 7, Cain discloses a structured particulate system with active sub-particles disclosed in claim 2 from about 0.5% to 35% of the total fat based system weight (page 1; line 20-21).
- f. Referring to claims 8 and 15, the above reference discloses a confectionary mixture comprising an acid, a carbonate and a stabilizer (Cain; ¶ 0006) as in the claimed product, it does not disclose the overrun of the product. However, applicant has chosen to describe his/her product with physical characteristics that are beyond measurement by this office and as a practical matter, the Patent Office is not equipped to manufacture prior art products and compare the claimed

product with that of prior art products. Therefore, that burden is being shifted to applicant to show that the product of the references does not contain an overrun of at least about 70% and that the claimed product is indeed patentably distinct.

g. Referring to claim 9, Cain discloses the active sub-particles are present in a network of particles consisting of stabilizers such as gum (page 2, line 41-45).

h. Referring to claim 10, Cain discloses a fat based system which is a particulate system (Cain; page 2, line 20 and ¶ 0006).

i. Referring to claim 11-12, Cain discloses a fat based system wherein the confectionary product is a frozen confectionary product such as ice cream (Cain; ¶ 0009).

8. Claims 1-3, 7-9, 11, and 13-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nayyar et al. US patent 5853785.

j. Referring to claims 1 and 13-14, Nayyar discloses a dry mix (premix) for preparing a confectionary product containing foam generating properties. The dry mix comprises of a carbon dioxide generating composition comprising an acid, a carbonate (column 4, line 10-15) and a stabilizer such as gum (column 4, line 35-37). The dry mix when combined with water have a resulting solid content from



12-30% (column 1, line 44-46) wherein the mixtures is formed without mechanical aeration (column 1, line 55-61).

Nayyar disclose affecting the pH (column 4, line 14) wherein food acid is used to provide flavor to the dry mix with milk protein (column 3, line 35-42). It is inherent to adjust the level of acidity for the suitability of its intended application, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Although the above reference teach a confectionary mixture comprising an acid, a carbonate and other foam agent (column 4, line 10-21) as in the claimed product, it does not disclose the overrun of the product. However, applicant has chosen to describe his/her product with physical characteristics that are beyond measurement by this office and as a practical matter, the Patent Office is not equipped to manufacture prior art products and compare the claimed product with that of prior art products. Therefore, that burden is being shifted to applicant to show that the product of the references does not contain an overrun of at least about 30% and that the claimed product is indeed patentably distinct.

k. Referring to claim 2, Nayyar discloses a premix wherein the carbonate is selected from carbonate salts and bicarbonate salts such as sodium bicarbonate (column 4, line 10-11).

- l. Referring to claim 3, Nayyar discloses a dry mix wherein the acid is a food acid (organic acid) such as ascorbic acid which naturally occur within lemons (column 3, line 34-35).
- m. Referring to claim 7, Nayyar discloses a dry mix comprising of carbonating salts from 0.2% to 2% of the dry mixture (Nayyar; column 4, line 15).
- n. Referring to claims 8 and 15, Nayyar disclosure recites in column 4, lines 6-11 and lines 16-29, that:

The presence of carbonating salts in the dry mix has been found to both further facilitate the development of fine grained ice crystals and to provide a pleasant, refreshing, organoleptic effect. The level of salts should not be so great as to provide an adverse flavor impact. Carbonate and bicarbonate salts may be used for this purpose with sodium bicarbonate being a preferred material.

It has been found desirable, particularly in combination with carbonating salts, to include a foam agent in the dry mix. Natural foam agents such as quillaja extract powder and yucca extract powder would be suitable. Fruit and/or vegetable juice solids would also be a source of natural foam agent. Food-approved, chemical foam agents could also be utilized, provided of course they are in dry form or could be plated on the surface of a mix component, such as sucrose. A suitable chemical foam agent is polyoxyethylene (20) sorbitan monostearate, available in liquid form from ICI Surfactants (Wilmington, Delaware) as Tween.RTM. 60. The foam agent is believed to further improve the ice crystal

structure/morphology and the refreshment value.

Although the above references teach a confectionary mixture comprising an acid, a carbonate and other foam agent (column 4, line 10-21) as in the claimed product, it does not disclose the overrun of the product. However, applicant has chosen to describe his/her product with physical characteristics that are beyond measurement by this office and as a practical matter, the Patent Office is not equipped to manufacture prior art products and compare the claimed product with that of prior art products. Therefore, that burden is being shifted to applicant to show that the product of the references does not contain an overrun of at least about 70% and that the claimed product is indeed patentably distinct.

o. Referring to claim 9, Nayyar discloses a premix wherein the stabilizer is selected from gums (Nayyar; column 4, line 36-40).

p. Referring to claim 11, Nayyar discloses a dry mix wherein the confectionary product is a chilled or frozen confectionery product (column 1, line 50 and line 65-67).

9. Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nayyar et al. US patent 5853785 and evidenced by [rehabadvisor.pathnet.org](http://rehabadvisor.pathnet.org).

q. Nayyar 16-17 discloses chilling the composition to about negative 4.5 °C to 1 °C (Nayyar; column 1, line 51) and further discloses the freezing the

composition to a frozen state (Nayyar; column 1, line 65-67). It is known as evidenced by rehabadvisor.pathnet.org that freezers are kept at a temperature about negative 17 to -15 ° C. Therefore, it is inherent to adjust the freezing temperature for the intended application of a frozen product, since discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

10. Claims 4-6, 10, 12, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nayyar et al. US patent 5853785 in view of Cain EP 1245156 A2.

r. Referring to claim 4-5, Nayyar disclose the use of a food grade organic acid such as ascorbic acid which naturally occur in lemons (Nayyar; column 3, line 34-35 and column 4, line 13). However, Nayyar is silent to the organic acid types. Cain discloses a foaming particulate system which comprises organic acids such as lactic acid, tartaric acid and mixture thereof (Cain; page 2, line 39-40) which are known forms of a monoprotic acid and a diprotic acid, respectively. Regarding the acid of Nayyar, it would have been obvious to one skilled in the art at the time the invention was made to include the acid of Cain to give desired effect of fizziness to food product (Cain; page 2, line 14).

s. Referring to claim 6, Nayyar discloses in example 7 a dry mix wherein the molar ratio of the acid to carbonate present is 1.3:0.5. Cain discloses in table 1 wherein the molar ratio of acid to carbonate present is about 1:1. Based on the

secondary references it would have been obvious to one skilled in the art at the time the invention was made to include the molar ratio of acid to carbonate within food products as the instant claim.

t. Referring to claim 10, Nayyar discloses a premix which is a particulate (dry mix) (Nayyar; column 1, line 42-43). Cain discloses a structured particulate system comprising similar material (Cain; page 2, line 20 and ¶ 0006). Based on the secondary references it would have been obvious to one skilled in the art at the time the invention was made to include particulates as the instant claim.

u. Referring to claims 12 and 18-20, Nayyar discloses a method wherein the confectionery product is frozen to a solid state and contain milk product such as that in ice cream (Nayyar; column 1, line 65-67 and column 4, line 58). Cain discloses a fat based system wherein the effects such as foaming are applied to food products, i.e. ice-cream (Cain; page 2, line 14 and line 54). Based on the secondary references it would have been obvious to one skilled in the art at the time the invention was made to include ice confectionary products as the instant claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DALILA TOUSSAINT whose telephone number is

(571)270-7088. The examiner can normally be reached on Monday - Friday, 8:00 a.m. - 5:00 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DAVID R. SAMPLE can be reached on (571)272-1376. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/  
Primary Examiner, Art Unit 1794

DT